UNITED STATES PATENT AND TRADEMARK OFFICE

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EXAMINER
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ART UNIT	PAPER NUMBER
4141	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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	Application No.	Applicant(s)
Office Action Summary	10/807,323	ANDO, MITSUO
	Examiner	Art Unit
	JEAN-PAUL MILLER	4141

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>03/24/2003</u>.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-66</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-66</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>03/24/2004</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All   b)☐ Some * c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date <u>See Continuation Sheet</u>.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____ .

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :12/12/2006, 11/27/2006, 03/03/2006, 01/17/2006, 11/21/2005, 05/05/2005, 11/10/2004, and 06/29/2004 .

DETAILED ACTION

1.   *Claims 1-66* are pending.

Information Disclosure Statement

1.   Examiner crossed through applicant's own patent application, 10/807323, when found in IDS forms. All other cases were considered. The information disclosure statements (IDS) filed on 12/12/2006, 11/27/2006, 03/03/2006, 01/17/2006, 11/21/2005, 05/05/2005, 11/10/2004, and 06/29/2004 are in compliance with the provisions of 37 CFR 1.97 and all non-crossed out items have been considered by the examiner. An executed copy of the IDS' are enclosed with this office action.

Specification

2.   The specifications received on 03/24/2004 have been objected. The use of the trademark Java™ has been noted throughout this application. It should be capitalized (e.g. JAVA) or properly attributed wherever it appears, and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks. The office respectfully requests correction.

Drawings

The drawings filed on 03/24/2004 have been accepted by the examiner.

Double Patenting

3.   The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees.   A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and In *re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4.   ***Claims 1-12, 29-40, and 48-59*** are provisionally rejected on the ground of

nonstatutory obviousness-type double patenting as being unpatentable over claim 3 of

copending Application No. 11/057,256. Although the conflicting claims are not

identical, they are not patentably distinct from each other because:

Claim 1:	Claim 1	The apparatus of claim 3
An image forming apparatus that includes a control part that provides common services on control of hardware	An image forming apparatus comprising: a platform that manages applications; and an operation screen display application managed by said	is the same invention. The "virtual machine"

resources to a plurality of applications so as to be able to include a plurality of applications, the image forming apparatus comprising: *- a virtual machine.* - an application that is executed by the virtual machine. *- an application management part managing the application that is executed by the virtual machine.*	platform so as to display operation screens, objects to be operated by said operation screens being the applications managed by said platform. **Claim 3** **The image forming apparatus as claimed in claim 1, wherein the operation screens include a starting operation screen for starting execution of one of the applications.**	aspect is shown in the specification as the apparatus is suggested to run in JSDK which runs byte-coded 'Servlets' on a "virtual machine". Claim 3 shows that the apparatus is designed to execute a plurality of applications.

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This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 112

5.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6.   **Claims 17, 27, 43 and 62** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7.   ***Claims 17, 27, 43 and 62*** contain the trademark Java™ further these claims

contain the trademark as a limitation. If the trademark or trade name is used in a claim

as a limitation to identify or describe a particular material or product, the claim does not

comply with the requirements of the 35 U.S.C. 112, second paragraph. Ex parte

Simpson, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the

trademark or trade name cannot be used properly to identify any particular material or

product. In fact, the value of a trademark would be lost to the extent that it became

descriptive of a product, rather than used as an identification of a source or origin of a

product. Thus, the use of a trademark or trade name in a claim to identify or describe a

material or product would not only render a claim indefinite, but would also constitute

an improper use of the trademark or trade name.

Claim Rejections - 35 USC § 101

8.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of
> matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the
> conditions and requirements of this title.

Claims 29-47 are rejected under 35 U.S.C. 101 because the claimed invention is

directed to non-statutory subject matter.

9.   ***Claims 29-47*** are non-statutory because they recite a computer program per se

representing functional descriptive material without a computer and/or a computer

readable medium. Specifically these claims stated the computer program in the

preamble and there exist mirrored claims for the apparatus, method, and computer

recordable medium of the claimed invention. These claims therefore only recited a

program per se and are non-statutory

Claim Rejections - 35 USC § 102

10.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act

of 1999 (AIPA) and the Intellectual Property and High Technology Technical

Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting

directly or indirectly from an international application filed before November 29, 2000.

Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior

to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

11.   ***Claims 1-9, 13-16, 18-26, 28-36, 40-42, 44-55, 59-61, and 63-66*** are rejected

under 35 U.S.C. 102(e) as being anticipated by Turnbull (US Patent Publication No.

US 2003/0041127 A1) published Feb 27, 2003.

   As per claim 1, Turnbull teaches:

   ***- An image forming apparatus that includes a control part that provides
common services on control of hardware resources to a plurality of applications
so as to be able to include a plurality of applications, the image forming***

apparatus comprising; (Turnbull, [0009], "An applet, or small application program, installed on a computing device") where a computer device is defined as (Turnbull, [0024] "include devices such as printers, copiers, scanners, fax machines, personal computers (PC's), laptop computers, personal digital assistants (PDA's), cell phones and the like.) A printer is clearly an image forming device and a PDA clearly has a plurality of applications.

- a virtual machine; (Turnbull, [0009], "An applet, or small application program, installed on a computing device") an applet is a type of Java™ application written to work with the JVM (Java Virtual Machine) a JVM is required to run an applet therefore a JVM which is a specific Virtual Machine is included.

- an application that is executed by the virtual machine; (Turnbull, [0009] "An applet, or small application program, installed on a computing device" applets are executed by a JVM. So there is an application "applet" being executed by a virtual machine "JVM" run in a browser.

- an application management part managing the application that is executed by the virtual machine; (Turnbull, [0009], "An applet, or small application program, installed on a computing device") it is clear that by the nature of the JVM that runs the applet. Applets can be included in an HTML page where the JVM is managed by the browser.

As per claim 2, the rejection of claim 1 is incorporated and Turnbull further teaches:

- ***The application that is executed by the virtual machine operates the image forming apparatus by using classes for controlling the image forming apparatus;*** (Turnbull, Figure 3) shows that the computing device runs the applets and acts to communicate with the computing device to control the device. Specifically in this instance the memory for firmware updating is controlled. This is gone through it more detail in paragraphs (Turnbull, [0036] through [0038] where it finishes by stating: "When the transaction is complete, the second applet automatically downloads and installs the upgrade onto computing device".)

As per claim 3, the rejection of claim 2 is incorporated and Turnbull further teaches:

- include an operation panel class for outputting information to an operation panel of the image forming apparatus and for inputting information from the operation panel; (Turnbull, [0013] "The devices typically have embedded Web browsers") It is known to people of common skill in the art that web browsers can be considered panels for inputting and outputting information.

As per claim 4, the rejection of claim 1 is incorporated and Turnbull further teaches:

- The application management part includes execution management functions that include a function for launching the application executed by the virtual machine; (Turnbull, [0022], "The email notifications are configured by the applet with an option that permits an email recipient to have the upgrade automatically installed on the computing device.") This must contain an execution management function to allow for automatic execution.

As per claim 5, the rejection of claim 1 is incorporated and Turnbull further teaches:

- the application management part downloads the application when the application is not installed in the image forming apparatus. (Turnbull, [0022] "The email notifications are configured by the applet with an option that permits an email recipient to have the upgrade automatically installed on the computing device.") This states it checks to see if software is installed and if not automatically installs it.

As per claim 6, the rejection of claim 1 is incorporated and Turnbull further teaches:

- the application management part refers to an application information file associated with the application, and updates the application on the basis of information in the application information file. (Turnbull, [0015] "The automatic discovery and email notification of firmware upgrades provides device users with effortless access to information about available firmware upgrades along with control over when and if a firmware upgrade should be installed onto a computing device.") This explains that the Applet calls up some kind of stored information file and bases its action from this file.

As per claim 7, the rejection of claim 6 is incorporated and Turnbull further teaches:

- the application management part compares a first version described in the application information file associated with the application with a second version described in another application information file associated with an update application, and the application management part replaces the application with the update application if the second version is newer than the first version; (Turnbull, [0015] "The benefits of the system and methods described herein include automatic discovery, notification, and installation of firmware upgrades for computing

devices.") To upgrade the application needs to have knowledge of versions and have some way of looking them up.

As per claim 8, the rejection of claim 5 is incorporated and Turnbull further teaches:

- the application management part downloads the application from a memory card or from a Web site; (Turnbull, [0033] "FIG. 3 illustrates nonvolatile memory as including hard disk and EEPROM. EEPROM can include flash memory which is a special form of EEPROM.") Flash memory is known to be a memory card and (Turnbull, [0010] "The addresses typically include URL (uniform resource locator) addresses to Web page locations accessible by the computing device via the Internet or addresses to files on local servers accessible by the computing device over a local network.")

As per claim 9, the rejection of claim 6 is incorporated and Turnbull further teaches:

- the application management part downloads the application from a location described in the application information file associated with the application; (Turnbull, [0010] "The upgrade applet is configured with one or more search addresses that are predetermined to provide likely locations for the latest firmware upgrades.")To look up configured locations it must has some form of an information file.

As per claim 13, the rejection of claim 1 is incorporated and Turnbull further teaches:

- the image forming apparatus includes a server application that receives an operation request from a terminal apparatus connected to the image forming apparatus and that operates the image forming apparatus according to the operation request; (Turnbull, [0040] "where device is either a stand alone device having its own browser and communication link or a peripheral device coupled to a host computer that provides browser and a communication link.") and (Turnbull, [0038] "Where there is a cost involved with the upgrade, the selectable option is configured with a second applet that initiates a browser to navigate to the location of the upgrade and facilitate an e-commerce transaction to purchase the upgrade.") These two sentences say that Turnbull has taught a device that can have a server application in the form of a host computer and that by facilitating an e-commerce transaction that it would use the results of the transaction to "act according to the operation request."

As per claim 14, the rejection of claim 13 is incorporated and Turnbull further teaches:

- *the application management part communicates with the terminal apparatus;*
(Turnbull, [0027] "In general, email recipient receives and renders email notifications
from computing device regarding firmware upgrades, and through a user interface,
permits a user to respond to the notifications.") This shows some kind of user interface
on the terminal apparatus that allows the user to respond to requests from the
application management.

*Claims 15-16, 18, and 20-23 are the 'terminal' apparatus claims corresponding
to the 'image forming' apparatus claims 1-6 and 8 and objected under the same reason
set forth in connection of the objection of claims 15-16, 18, and 20-23 above while
Turnbull further teaches;*

- *A terminal apparatus that operates an image forming apparatus;* (Turnbull, Figure
3) It is clear that the upgrade applet (*virtual machine*) can run on both the host
computer (terminal apparatus) and the computing device (*image forming apparatus*)

*As per claim 19, the rejection of claim 15 is incorporated and Turnbull
further teaches:*

- *the terminal apparatus has a function for allowing a user to select whether to
access a hard disk of the image forming apparatus or to access a hard disk of the
terminal apparatus;* (Turnbull, [0034] "Hard disk 310 generally provides nonvolatile
storage of computer readable instructions, data structures, program modules and other
data for computing device 102. Thus, upgrade applet 314 modules, device driver 316
modules, and browser 106(1) module are stored on hard disk 310 and executed on
CPU(s) 302."(This is further show in (Turnbull, Figure 3.)

*As per claim 24 the rejection of claim 23 is incorporated and Turnbull
further teaches:*

- *the application management part receives file information stored in the memory
card and displays the file information on the terminal apparatus;* (Turnbull, Figure
3) It is clear that the upgrade applet (*virtual machine*) can run on either the host
computer (*terminal apparatus*) and the computing device (*image forming apparatus*)
and further that the devices have bi-directional communication with each other.

*As per claim 25 the rejection of claim 23 is incorporated and Turnbull
further teaches:*

- *the application management part sends URL information input into the
terminal apparatus to the image forming apparatus, so that the image forming
apparatus downloads the application from the Web site by using the URL
information;* (Turnbull, Figure 3) It is clear that the upgrade applet (*virtual machine*)

can run on either the host computer (***terminal apparatus***) and the computing device (***image forming apparatus***) and further that the devices have bi-directional communication with each other. (Turnbull, [0010] "The addresses typically include URL (uniform resource locator) addresses to Web page locations accessible by the computing device via the Internet or addresses to files on local servers accessible by the computing device over a local network.") This shows that the devices are shown to be able to communicate between them selves and have the nature of using URLs to complete these operations.

Claim 26 is the method claim corresponding to the claims 1, and 15 and objected under the same reason set forth in connection of the objection of claims 1 and 15 above Turnbull further teaches:

- connected to the image forming apparatus via a network; (Turnbull, [0025] "Computing device 102(2) illustrates a computing device such as a printer that is coupled to a host computer 108 and that accesses network 104 through browser 106(2) executing on host computer 108.") This explains and is also shown in figure 1 that there if an embodiment that uses a network to connect the devices in question together.

As per claim 28 the rejection of claim 26 is incorporated and Turnbull further teaches:

- the image forming apparatus includes an application management part for managing the application, and the terminal apparatus includes a remote application management part for managing the application by communicating with the application management part. (Turnbull, Figure 3) it is clear from the figure that there is a plurality of operations running on the apparatus and it is also obvious from the figure that there is communication both ways as shown with the communication arrow.

Claim 29 is the computer program claim corresponding to the claims 1, 15, and 26 and objected under the same reason set forth in connection of the objection of claims 1, 15, and 16 above.

Claim 30 is the computer program claim corresponding to the claims 2 and 16 and objected under the same reason set forth in connection of the objection of claims 2 and 16 above.

Claim 31 is the computer program claim corresponding to the claims 3 and 18 and objected under the same reason set forth in connection of the objection of claims 3 and 18 above.

Claim 32 is the computer program claim corresponding to the claims 4 and 20 and objected under the same reason set forth in connection of the objection of claims 4 and 20 above.

Claim 33 is the computer program claim corresponding to the claims 5 and 21 and objected under the same reason set forth in connection of the objection of claims 5 and 21 above.

Claim 34 is the computer program claim corresponding to the claims 6 and 22 and objected under the same reason set forth in connection of the objection of claims 4 and 20 above.

Claim 35, 36, and 40 are the computer program claims corresponding to the claims 7, 9 and 12 respectively and are objected under the same reason set forth in connection of the objection of claims 7, 9 and 12 above.

Claim 41 is the computer program claim corresponding to the claim 1, 15, 26, and 29 and objected under the same reason set forth in connection of the objection of claim 1, 15, 26, and 29 above.

Claim 42 is the computer program claim corresponding to the claims 2, 16, and 30 and objected under the same reason set forth in connection of the objection of claims 2, 16, and 30 above.

Claim 44 is the computer program claim corresponding to the claims 3, 18, and 31 and objected under the same reason set forth in connection of the objection of claims 3, 18, and 31 above.

Claim 45 is the computer program claim corresponding to the claims 4, 20, and 32 and objected under the same reason set forth in connection of the objection of claims 4, 20, and 32 above.

Claim 46 is the computer program claim corresponding to the claims 5, 21, and 33 and objected under the same reason set forth in connection of the objection of claims 5, 21, and 33 above.

Claim 47 is the computer program claim corresponding to the claims 6, 22, and 34 and objected under the same reason set forth in connection of the objection of claims 6, 22, and 34 above.

Claim 48 is the computer readable recording media claim corresponding to the claims 1, 15, 26, 29, and 41 and objected under the same reason set forth in connection of the objection of claims 1, 15, 26, 29, and 41 above.

Claim 49 is the computer readable recording media claim corresponding to the claims 2, 16, 30, and 42 and objected under the same reason set forth in connection of the objection of claims 2, 16, 30, and 42 above.

Claim 50 is the computer readable recording media claim corresponding to the claims 3, 18, 31, and 44 and objected under the same reason set forth in connection of the objection of claims 3, 18, 31, and 44 above.

Claim 51 is the computer readable recording media claim corresponding to the claims 4, 20, 32, and 45 and objected under the same reason set forth in connection of the objection of claims 4, 20, 32, and 45 above.

Claim 52 is the computer readable recording media claim corresponding to the claims 5, 21, 33, and 46 and objected under the same reason set forth in connection of the objection of claims 5, 21, 33, and 46 above

Claim 53 is the computer readable recording media claim corresponding to the claims 6, 22, 34, and 47 and objected under the same reason set forth in connection of the objection of claims 56, 22, 34, and 47 above.

Claim 54 is the computer readable recording media claim corresponding to the claims 7 and 35 and objected under the same reason set forth in connection of the objection of claims 7 and 35 above.

Claim 55 is the computer readable recording media claim corresponding to the claims 9 and 36 and objected under the same reason set forth in connection of the objection of claims 6 and 36 above.

Claim 59 is the computer readable recording media claim corresponding to the claims 13 and 40 and objected under the same reason set forth in connection of the objection of claim 13 and 40 above.

Claim 60 is the computer readable recording media claim corresponding to the claims 1, 15, 26, 29, 41, and 48 and objected under the same reason set forth in connection of the objection of claims 1, 15, 26, 29, 41, and 48 above.

Claim 61 is the computer readable recording media claim corresponding to the claims 2, 16, 30, 42, and 49 and objected under the same reason set forth in connection of the objection of claims 2, 16, 30, 42, and 49 above.

Claim 63 is the computer readable recording media claim corresponding to the claims 3, 18, 31, 44, and 50 and objected under the same reason set forth in connection of the objection of claims 3, 18, 31, 44, and 50 above.

Claim 64 is the computer readable recording media claim corresponding to the claims 4, 20, 32, 45, and 51 and objected under the same reason set forth in connection of the objection of claims 4, 20, 32, 45, and 51 above.

Claim 65 is the computer readable recording media claim corresponding to the claims 5, 21, 33, 46, and 52 and objected under the same reason set forth in connection of the objection of claims 5, 21, 33, 46, and 52 above.

Claim 66 is the computer readable recording media claim corresponding to the claims 6, 22, 34, 47, and 53 and objected under the same reason set forth in connection of the objection of claims 6, 22, 34, 47, and 53 above.

Claim Rejections - 35 USC § 103

12.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

13.   *Claims 10-12, 37-39, and 56-58* are rejected under 35 U.S.C. 103(a) as being

unpatentable over Turnbull (US Patent Publication No. US 2003/0041127 A1)

published 27 February 2003, in view of Kanai et al. (US Patent Publication US

20010002472 A1) published 31 May 2001.

As per claim 10, the rejection of claim 6 is incorporated:

-Turnbull does not explicitly disclose **"the application management part checks whether the application is executable in the image forming apparatus before downloading the application."** However, Kanai et al. in an analogous art discloses the **"checks"** in (Kanai et al., figure 1), a method for getting attribute information of a file across a network.

Therefore it would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate the teachings of Turnbull into Kanai et al. to ensure

that the file was the executable before downloading. The modification would be obvious to a person of ordinary skill in the art and they would want to perform this check before the automatic downloads began and the automatic install ran because to begin the non-volatile write process with improper data for the firmware would result in a inoperable device.

As per claim 11, the rejection of Claim 10 is incorporated:

-Turnbull does not explicitly disclose
"the application management part checks whether the application is executable on the basis of information described in the application information file associated with the application." However, Kanai et al. in an analogous art discloses an information file in (Kanai et al., [0052] "The copy of the web page, the attribute information, and the electronic certificate can otherwise be provided to the requester via the Internet.") This is noted as the "copy of the attribute information.

Therefore it would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate the teachings of Turnbull into Kanai et al. to ensure that the file was the executable by checking the attribution information. The modification would be obvious to a person of ordinary skill in the art to reduce the likelihood of the device becoming inoperative during automatic operations.

As per claim 12, the rejection of claim 10 is incorporated:

-Turnbull does not explicitly disclose *"the application management part checks items including a resource item in the image forming apparatus necessary for executing the application."*

However, Kanai et al. in an analogous art discloses a resource item in (Kanai et al., [0052] "The copy of the web page, the attribute information, and the electronic certificate can otherwise be provided to the requester via the Internet."), this is noted as a resource item. Notice that Turnbull has previously disclosed (Turnbull, figure 3) that both devices in questions could have the hardware that would allow for the resource item to be in the image forming device.

Therefore it would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate the teachings of Turnbull into Kanai et al. to ensure that the file was the executable by checking the resource item. The modification would be obvious to a person of ordinary skill in the art to reduce the likelihood of the device becoming inoperative during automatic operations.

Claim 37-39 are the computer program claims corresponding to the claims 10-12 respectively and objected under the same reason set forth in connection of the objection of claim 10-12 above.

Claim 56-58 are the computer readable recording media claims corresponding to the claims 10-12 and 37-39 respectively and objected under the same reason set forth in connection of the objection of claim 10-12 and 37-39 above.

Claim Rejections - 35 USC § 103

14.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

15.   *Claims 17, 27, 43, and 62* are rejected under 35 U.S.C. 103(a) as being unpatentable over Turnbull (US Patent Publication No. US 2003/0041127 A1) published 27 February 2003, in view of Morrow et al. (US Patent Publication US 20020019891 A1) published 14 Feb 2002.

As per claim 17, the rejection of claim 15 is incorporated and Turnbull further teaches:

- the terminal apparatus operates the image forming apparatus by using a Java based distributed object processing technique; (Turnbull, [0036] "Upgrade applet 314 of FIG. 3 is a small application program typically written in Java programming language or some version thereof, such as Chai." Chai is also a Java based virtual machine used by Hewlett Packard.

     -Turnbull does not explicitly disclose **"the terminal apparatus operates the image forming apparatus by using a Java based distributed object processing technique"** however Morrow et al. explains a distributed system (Morrow et al., [0032] "The GDCU system 10 incorporates a unique distributed processing configuration that allows for multiple tasks with <u>arbitrary devices</u>."

     Figure 3 of Turnbull shows that either of the devices would be capable of running these process and therefore it would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate the teachings of Turnbull and Morrow et al. to allow for the terminal to request operations on the device instead of tasking the

terminal with operations that may involve complex specialized functions for the device such as firmware updating. As explained in (Morrow et al., [0033] "Specifically, a preferred embodiment generic device controller system 10 of the present invention connects to the processor 40 (sometimes referred to as a master control unit, or a MCU) with associated support hardware.") This would have the effect of both reducing the load on the terminal and allowing for certain highly specialized functions on the device to only be coded on one hardware platform instead of separate platforms therefore reducing the cost of coding.

Claim 27 is the method claim corresponding to the claim 17 and objected under the same reason set forth in connection of the objection of claim 17 above.

Claim 43 is the computer program claim corresponding to the claims 17 and 27 and objected under the same reason set forth in connection of the objection of claims 17, and 27 above.

Claim 62 is the computer readable recording media claim corresponding to the claims 17, 27, and 43 and objected under the same reason set forth in connection of the objection of claims 17, 27, and 43 above.

Conclusion

16.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to JEAN-PAUL MILLER whose telephone number is

(571)270-3894. The examiner can normally be reached on Monday to Thursday 7:30-

17:00 ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Chameli Das can be reached on (571)272-3696. The fax phone number for

the organization where this application or proceeding is assigned is 571-270-4894.

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USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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December 14, 2007

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